

# Kentucky Title II Institutional Pass Rate Summary

1999-2000 and 2000-2001

Teacher Preparation Program	1999-2000 Summary Pass Rate		2000-2001 Summary Pass Rate	
	N	Pass Rate	N	Pass Rate
ALICE LLOYD COLLEGE	32	81%	27	70%
ASBURY COLLEGE	80	99%	47	98%
BELLARMINE UNIVERSITY	92	98%	94	97%
BEREA COLLEGE	23	96%	11	100%
BRESCIA UNIVERSITY	17	100%	13	92%
CAMPBELLSVILLE UNIVERSITY	52	98%	34	94%
CENTRE COLLEGE	11	100%	5	***
CUMBERLAND COLLEGE	78	88%	44	80%
EASTERN KENTUCKY UNIVERSITY	260	95%	265	94%
GEORGETOWN COLLEGE	41	98%	25	100%
KENTUCKY CHRISTIAN COLLEGE	27	85%	19	84%
KENTUCKY STATE UNIVERSITY	38	55%	25	36%
KENTUCKY WESLEYAN COLLEGE	20	90%	22	91%
LINDSEY WILSON COLLEGE	28	96%	23	91%
MIDCONTINENT COLLEGE	NA	NA	5	***
MIDWAY COLLEGE	7	***	10	90%
MOREHEAD STATE UNIVERSITY	226	93%	145	89%
MURRAY STATE UNIVERSITY	252	95%	231	97%
NORTHERN KENTUCKY UNIVERSITY	212	96%	248	95%
PIKEVILLE COLLEGE	22	100%	18	100%
SPALDING COLLEGE	35	94%	47	91%
THOMAS MORE COLLEGE	16	94%	16	94%
TRANSYLVANIA UNIVERSITY	21	100%	26	96%
UNION COLLEGE	44	89%	41	90%
UNIVERSITY OF KENTUCKY	206	96%	267	97%
UNIVERSITY OF LOUISVILLE	120	88%	153	93%
WESTERN KENTUCKY UNIVERSITY	364	96%	303	92%
<b>Summary Total &amp; Pass Rates</b>	<b>2,324</b>	<b>94%</b>	<b>2,166</b>	<b>93%</b>

Data Source: Education Testing Service 1999-2000 and 2000-2001 Title II pass rate report

\*\*\* Cells with less than 10 are not calculated

NA = New program, no report submitted for 1999-2000

Council on Postsecondary Education  
Committee on Equal Opportunities  
April 15, 2002

## Teacher Certification in Kentucky Student Performance: 2001 PRAXIS

At the April 2001 and February 2002 meetings of the Committee on Equal Opportunities, the Educational Professional Standards Board staff reported that new cut-off standards had been established and would be applied to students taking the PRAXIS test in calendar year 2001. The new cut-off scores have been implemented and are being applied to students that are to be certified to teach in Kentucky primary and secondary schools. The EPSB staff indicated that the cut-off scores were raised for many test components and lowered for a few. The PRAXIS tests are prepared and given by the Education Testing Service. The results of the first round of testing under the new standards were released April 8, 2002.

The committee asked the staff of EPSB to attend the April 15 meeting to discuss the performance of Kentucky's students on the PRAXIS test following implementation of the new standards. Additional information describing the test and the test results are presented in the attachments.

Staff preparation by Sherron Jackson

# **Validation and Standard-Setting Procedures for Kentucky Teacher Tests**

## ***INTRODUCTION***

The Education Professional Standards Board (EPSB) is charged with ensuring that persons who desire to teach in Kentucky's public schools are qualified to do so. The process of ensuring qualifications begins when a person applies for admission to a teacher training program (e.g, requirements include a 21 on the ACT and at least a 2.5 GPA), and continues throughout his/her academic and teaching career (e.g., requirements include successful student teaching and internship experiences). One measure of a person's qualifications is an assessment of his/her knowledge of the subject he/she wants to teach. This measure is taken through the use of a test that the teacher candidate must pass in order to receive initial certification. Given the high stakes of this test for both the Commonwealth and the prospective teachers, it is important that the procedures used to validate the test and set the standard (i.e., the cut-off score) are reasonable and reflect sound professional judgment.

The EPSB conducted validation and standard-setting studies on each of the 43 tests it uses. Forty-one of these tests were developed by the Educational Testing Service (ETS). The other two were developed by the Kentucky Department of Education for use in certification of early childhood teachers and principals, and were subject to similar rigors in determining validity and setting passing scores.

## ***TEST DEVELOPMENT AND NATIONAL VALIDATION PROCEDURE***

All of the ETS tests were initially developed using a job analysis approach. The purpose of job analysis is to define domains of knowledge that persons of experience (in this case, practicing educators) deem necessary to entry-level competence. Each job analysis consisted of a similar process:

ETS test development staff constructed an initial draft of domain knowledge. State certification requirements, current test specifications, and salient professional literature were reflected in the draft.

An external review panel consisting of approximately ten subject-matter experts, teacher educators, and school administrators reviewed the draft, and revisions made to the domain statements as recommended by the panel.

An advisory test development committee also composed of approximately ten members with representation by race, ethnicity, gender, geographic region, and levels of professional practice and responsibility then reviewed the revised draft domain. Additional revisions were made as necessary.

The draft domain then was subjected to verification/refutation through a national survey involving several hundred teachers, teacher educators, and administrators. Domain statements remained in the draft only if they were judged to be important by the total group of respondents and by the relevant content subgroups of teachers.

The knowledge domain statements were then used as the basis from which to develop a pool of test questions. The entire pool of test questions were subjected to a multi-state validity study in which the validity and fairness of each item were evaluated. More than 400 teachers and teacher educators from more than 30 states participated in the appraisal process. At least 20 people evaluated each test item, and at least 10 of these identified themselves as African American, Native American, Hispanic American, or Pacific/Asian American.

Each item was evaluated by each of the evaluators on the basis of three criteria:

- 1) The relationship between the knowledge or skill measured by the item and the test specifications.
- 2) The importance of the knowledge or skill measured by the item to the job of an entry-level teacher.
- 3) The fairness of the item.

Each item on the test had to be approved by a statistically significant majority of the review group (e.g., for a group of 20, this meant that at least 15 had to give the item a positive rating at a significance level of .05) or it was rejected or revised. Furthermore, if there was even one negative response to the fairness question, the item was then reviewed by an independent committee to determine if it should be revised, rejected, or retained.

From the array of nationally validated tests as described above, the EPSB selected those that were content-matter appropriate, and then each selected test was subjected to a state-level validation and standard-setting study.

## ***STATE VALIDATION AND STANDARD-SETTING PROCEDURES***

### **Panel Selection**

The selection of the panel to review a test is the single most important part of the state validation and standard setting procedures. Typically a panel consists of 10-20 members who are (1) familiar with the job requirements in the relevant certification area and the capabilities of a typical beginning teacher, and (2) representative of the state's educators in terms of gender, ethnicity, and geographic location. The primary criteria used in Kentucky to select members of the panels were:

- certification in the relevant subject area;
- currently teaching the relevant subject area; and
- at least one year, but not more than seven years of teaching experience in the relevant subject area.

### **Validation Procedure**

Kentucky was assisted by ETS in the state validation process to ensure that the process was aligned with accepted best practices.

#### ***Rating the importance of the test items***

Panelists reviewed each item on the test and responded to the question: "How important is the knowledge and/or skill stated or implied by this test question for the job of an entry-level teacher?" Panelists were asked to rate the importance as "very important," "important," "slightly important," or "not important." The ratings of "very important" and "important" were considered positive ratings. To ensure consistency in the evaluation of panelists' ratings, ETS requested that a two-part decision rule be established regarding the minimum number of positive ratings necessary for each test item and for the test as a whole to be considered valid in Kentucky. Kentucky established criteria that required (1) 60 percent of the panelists' giving an item a positive rating in order for that item to be considered job relevant, and (2) 70 percent of the items' being considered job relevant for the test to be considered valid. Kentucky also stipulated that for those items under the 60 percent rule but above 50 percent, and for those tests below the 70 percent rule but above 60 percent, review by another panel was necessary.

#### ***Rating the fairness of each item***

Panelists were then asked: "Are any of the questions unfair for examinees of either sex or any ethnic, racial, or religious group?" Each item was reviewed to determine if any panelist identified any language that might render an item unfair based on gender, ethnicity, race, or religion. If a panelist noted an "unfair" item, he/she was asked to provide a brief explanation

of his/her concern and identify the affected group. ETS staff then reviewed each identified item to determine the appropriate revision or action.

### ***Kentucky Department of Education review***

Program consultants from the Kentucky Department of Education reviewed the tests relative to their area(s) of responsibilities to ensure that the content covered by the tests aligned with the Kentucky Board of Education's Academic Expectations and Core Content used in the public schools, P-12.

### **Standard Setting Procedure**

#### ***Multiple Choice Tests***

The process for standard setting for multiple-choice tests used a modified Angoff method of selection – i.e., use of an expert panel. Kentucky's expert panels consisted primarily of teachers who were teaching in the relevant subject areas. All panelists received training on how to judge test questions, on the concept of minimal competence, and on the concept of test fairness. For each panel, panelists' item-specific responses were aggregated into a recommended minimum scale (as opposed to "raw" score) score that should be required of all new teachers. All panels' recommendations were then forwarded to the EPSB for review and approval.

#### ***Constructed Response Tests***

The benchmark method was used for standard setting for tests with constructed response items. A rating form was used to record three panelists' judgments regarding what should be the passing score on the question under review. Following each of the first two judgments, panelists were provided an opportunity to discuss their scores -- not to urge the group toward consensus, but rather to explore a variety of perspectives. Following the second discussion opportunity, panelists each were asked to provide a final passing score for that particular question. These scores were then averaged and presented to the EPSB as the recommended minimum scale score that should be required of all new teachers.

#### ***EPSB Review and Setting of Passing Scores***

Setting a passing score on a test for licensure/certification is a policy decision. While the recommendations of the EPSB's standard setting panels were deemed very important, the board also considered other factors, such as the possibility that, by using the panel's recommendation, a qualified person would be rejected or an unqualified person accepted. The EPSB in some cases adjusted the recommended score within a range they had agreed upon. The process of adjustment is a standard procedure used in establishing cut-off scores.

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